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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,626	05/31/2001	Keiichi Maeda	SON-1539/CON	7772

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EXAMINER

MAYEKAR, KISHOR

ART UNIT PAPER NUMBER

1753

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/867,626

Applicant(s)

MAEDA, KEIICHI

Examiner

Kishor Mayekar

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4, 8, 9, 11-13 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2, 4, 8, 9, 11-13 and 23-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 2, 4, 8, 9 and 11-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. New claim 28 is objected to because of the typo error in the following phrases "gas supplying part" and "gas evacuation part" (emphasis added). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13, 23, 25, 26 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, the phrase "transporting" needs to be replaced with the phrase --adapted for transporting-- to eliminate reference to a method of operating the apparatus.

In claim 23, the phrase "said transportation chamber" in line 2 lacks antecedent basis.

In claim 25, the phrase "said function" lacks antecedent basis.

In claim 26, the phrase "said non-oxidative atmosphere" lacks antecedent basis.

In claim 28, the same is applied to claim 13 to the phrase "being connected".

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 2, 4, 9, 12, 13, 23-27 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somekh et al. (US 6,352,467 B1) in view of Shiraiwa (US 5,404,894). Somekh's invention is directed to an integrated electrodeposition and chemical polishing tool for processing semiconductor device. Somekh discloses

that the tool comprises a transportation chamber 18', a dual load dock 80 with closed sliding door 94 to seal lock dock chamber, pre-treatment means 14', electroplating means 14', a post-treating chamber 82 (Fig. 3, 5-7 and col. 3, lines 7-9, and col. 6, lines 29 through col. 7, line 7). The difference between Somekh and the above claims is the manner of operating the apparatus (the chambers are maintained in a non-oxidative atmosphere) and/or the provision of gate valves in place of Somekh's port 52 and sliding door 94.

As to the former, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Somekh's teachings because the manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte Wikdahl* 10 USPQ 2d 1546 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889 (BPAI 1988); *In re Finterswalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235 (CCPA 1967).

As to the latter, Shiraiwa in a conveyor apparatus for processing semiconductor device shows the provision of gate valve to isolate the loading/unloading dock, the transportation chamber and processing chambers (Fig. 1 and col. 5, line 58 through col. 6, line 12). The subject matter as a whole would

have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Somekh as shown by Shiraiwa because the selection of any of known equivalent chamber isolating means would have been within the level of ordinary skill in the art.

As to the subject matter of claim 9 or 27, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings because it has been held on the intended use of a device that "apparatus claims cover what a device is, not what a device does", *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ 2d 1525. See also MPEP 2115 for material or article worked upon by apparatus.

7. Claims 8, 11 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somekh '467 as modified by Shiraiwa '894 as applied to claims 2, 4, 9, 12, 13, 23-27 and 29-31 above, and further in view of DiCicco (US 4,520,834). The difference between the references as applied above and the instant claims is the provision that the plating chamber includes a gas supplying port (or gas supply) and a gas evacuation port (or gas exhaust). DiCicco shows in an apparatus for processing semiconductor device the provision of an inlet port to provide a desired

atmosphere during the electroplating process (col. 4, lines 8-19 and Fig. 2a). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the references' teachings as shown by Decicco because the motivation to make a specific structure is always related to the properties or uses one skilled in the art would expect the structure to have, *In re Newell* 13 USPQ 2d 1248, *Fromson v. Advance Offset Plate* 225 USPQ 26; *In re Gyurik* 201 USPQ 552.

Response to Arguments

8. Applicant's arguments filed June 13, 2005 have been fully considered but they are not persuasive because of the new ground of rejections as set forth in the above paragraphs.

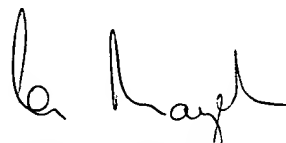
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kishor Mayekar', is positioned above the printed name.

Kishor Mayekar
Primary Examiner
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